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# USSR REPORT Human Resources

No. 66

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### SHCHEKINO EXPERIENCE AT KHARKOV OBLAST PLANT DETAILED

Kiev EKONOMIKA SOVETSKOY UKRAINY in Russian No 4, Apr 82 pp 81-84

/Article by A. Strakhov, economist, and A. Makedonskiy, candidate of economic sciences, Kharkov; "Experience in the Application of the Shchekino Method for the Provision of Material Incentives at the Stepok State Pure-Bred Animal-Raising Plant in Kharkov Oblast"7

/Text/ The motto of the Shchekino Chemical Combine workers, "More Output with a Smaller Number of People," has met with a warm response among workers in agricultural production. The main purpose of the experiment, which is being carried out at 300 of the country's sovkhozes, is to discover the optimal conditions for material encouragement of workers in order to raise their interest in increasing production and labor productivity, and in adopting and fulfilling intensive plans, while ensuring a rapid rate of labor productivity growth, one that stays ahead of labor remuneration.

Given the deficit of manpower in agricultural production, a reduction in the number of employees achieved through improvements in technology and labor organization, as well as work to raise the level of mechanization in production processes and other measures, have top-priority significance in the successful fulfillment of the food program in the 11th Five-Year Plan.

The Stepok Gosplemzavod /State Pure-Bred Animal-Raising Plant/ located in the Barvenskiy Rayon of Kharkov Oblast is a large-scale agricultural enterprise which specializes in raising pure-bred sheep of the "Prekos" strain. During the 10th Five-Year Plan the sovkhoz achieved definite success in its production and financial activities. The volume of agricultural production grew, as did the realization of agricultural products and labor productivity. For example, sales to the state of output grew in comparison with the 10th Five-Year Plan by 24.2 percent for meat, by 23 percent for wool and by 7.2 percent for grain. The 1972 shift by the farm (one of 300 sovkhozes in the country to do so) to the experimental conditions of the Shchekino method contributed significantly to this growth.

The lengthy operating experience (which extends back many years) of the sovkhozes which were shifted to complete self-financing, provides evidence that the reform contributed to a significant increase in production effectiveness. The sovkhozes showed increases in agricultural crop yields, in the productivity of animals, and expanded reproduction was carried out with their own funds. The rights of farm units in planning their own production and financial activities were expanded, and to a certain degree the forms and methods of production management were changed. The reform led to a strengthening of the collective material interest on the part of the workers in the final results of production. However, some problems which arose in the course of the reform remained unresolved or incompletely resolved.

For example, in the course of introducing complete self-financing in the sovkhozes the question of material concern and responsibility of the collectives for more effective utilization of fixed and working asssets was not fully resolved. Payments made into the budget for fixed capital (to be used in production) amounting to 1 percent of the value of these assets did not stimulate better use of the capital or a rational approach to the question of capital investment because these deductions amounted to an insignificant sum. The problem of economic incentives to develop intensive plans for the development of the farm unit remained unsolved.

Incentives to achieve high plan indicators are incentives for the planned increase in the effectiveness of social production. The measures which were adopted toward this end did not achieve the main goal, which was the adoption by the farm units of intense but achievable plans. The principle of paying for above-plan production at 1.5 times the usual rate, a principle which was applied in the 10th Five-Year Plan, proved to beineffective in that incentives were not created for fulfillment of the plan for sale of output throughout the five year period. Under the existing bonus system, engineering and technical employees were motivated to overfulfill the plan for the realization of agricultural output, while the blue-collar workers were motivated to overfulfill the plans for gross production output. The effect of these and other factors did not create concern on the part of the enterprises for the adoption of intensive plans because the material and moral incentives for the fulfillment of reduced plans were more vividly manifested than the losses from the effect of the economic levers which promote the adoption of intensive plans.

The Shchekino experiment at the Stepok Gosplemzavod in Kharkhov Oblast was conducted in the following manner. According to the experimental conditions, the sovkhoz was confirmed in its norms for the number of employees, output (or services) and for other labor expenditures. For the period of the experiment a stable (constant) plan fund of wages for the main production personnel was established for the sovkhoz. The wage fund for the remaining categories of employees (auxiliary production workers, construction costs, capital repair, etc.) was given to the sovkhoz above the stable wage fund. Additional funds for wages, funds which were assigned to the farm unit in the amount of 0.8 percent of the wage fund for every percent that the annual plan for production output was overfulfilled, were not used for supplementary payments above the wage rates or for bonuses.

When planning the basic indicators for the sovkhoz's production and creating the incentives according to the conditions of the exeriment, the principle of the average level achieved in the three years preceding the year of the experiment was used as the basis. The savings in the wage fund, which

were obtained as a result of the release of a number of employees, were used to provide material incentives.

The Stepok Sovkhoz created a single source of bonuses—the material incentive fund (previously bonuses were awarded from the wage and profit fund, as well as the material incentive fund /MIF/). The resources of the MIF were increased in comparison with the previously existing funds, and they were made directly dependent on the growth of gross output in the farm. The MIF was previously formed on the basis of one norm—percentages of the total sum of profits, but according to the experimental conditions, it was formed on the basis of two norms: the first was for every percent of gross production output growth above the level achieved in the three preceding years, while the second was a certain percent of the total sum of profits (minus payments for the production funds and the totals for deductions according to the first norm).

Employees receive bonuses for increases in production (realization) output, for obtaining and increasing profits and for other indicators which determine an increase in production, the growth of labor productivity, quality performance of work, and the adoption and fulfillment of intensive plans for production output. One very important feature of the experiment is the granting to sovkhoz manager of the right to develop by themselves the conditions for the awarding of bonuses to employees from the MIF and from savings in the wage fund. Further, the rate of growth in labor productivity must be greater than the growth in the remuneration for that labor.

Eight years have passed since the enterprise was shifted to the new conditions for material incentives and the results cannow be summed up.

The new principles of economic management, stipulated by the experimental conditions, have forced the collective of the sovkhoz to take a new attitude towards production and economic activities. Improvements in technology and labor organization, the mechanization of labor-intensive processes, the introduction of various devices which expand the opportunities for using small-scale mechanization, the introduction of progressive forms of labor organization, as well as the carefully thought-out distribution of obligations has made it possible for the sovkhoz to release and reduce the number of basic production employees, as well as the number of staff units of engineering and technical employees and service personnel (Table 1).

During the period under analysis the total number of Gosplemzavod employees was reduced by 58 people, or by 10.3 percent; in agricultural production the reduction included 187 people, or 41.1 percent, with gross output growth in comparable prices of 37.6 percent. The growth in the wage fund was accompanied by an accelerating rate of growth in production output.

As a result of the implementation of the experiment, the economic effectiveness of agricultural production was increased, and in particular, expenditures for human labor per unit of output were reduced; other indicators were improved as well. The enterprise's collective achieved particular success

in the mechanization of fodder production. A production line for the manufacture of various fodder granules is operating successfully at the gosplemzavod. This has made it possible to reduce expenditures for fodder preparation because fodder granules, which are no less nutritious than the components which go into them and even exceed that level, at the same time lend themselves very well to industrial production from the viewpoint of dispensing convenience and consumption, which reaches 95-97 percent.

The main point that was achieved with the Shchekino method for the provision of material incentives in the sovkhoz was the realization of the main requirement of the law of work-time savings—the savings of human labor.

While the average annual earnings of an employees engaged in agricultural production grew by 87.6 percent during the period under analysis, gross production output grew from 4,097 to 8,172 rubles, or by 99.5 percent, that is, the growth in labor productivity significantly outstripped the growth in wages. The amount of profit calculated per employee totaled 2,517, an increase of 40 percent.

Table 1

Economic Results of the Application of the Shchekino Metood for the Provision of Material Incentives at the Stepok Gosplemzavod in Kharkov Oblast

Indicators	Average for 1971-1972 (before intro- duction)	Average for 1978-1979	1978- 1979 in % of 1971- 1972
Average annual number of employees including those employed in agricultural	626	568	90.7
production	603	416	68.9
Wage Fund for the farm unit, thousands of rubles	815.4	1005.5	123.3
Material Incentive Fund, thousands of rubles	102.4	136.7	133.4
Total payments, thousands of rubles Average annual wages per employee in	917.8	114.2	124.4
agricultural production, in rubles Bonuses obtained per employee in a year,	1352.3	2537.0	187.6
in rubles	169.9	328.7	193.4
total, in thousands of rubles	2470.7	3399.7	137.6
per employee in agricultural production, rubles Profits obtained:	4097.4	8172.4	199.4
total, in thousands of rubles	1083.9	1046.9	96.5
per employee in agricultural production, rubles	1797.6	2516.6	140.0

With the introduction of the Shchekino method a clearer relation between the final results and the size of the material incentive is established. During this period the material incentive fund of the sovkhoz increased by 34,500 rubles per year, that is, by 33.5 percent.

The sovkhoz's shift to the experimental conditions exerted a positive influence on nearly all branches of basic production, including one of the main sectors of production—the raising of pure—bred sheep (Table 2).

Table 2

Economic Indicators for the Development of Sheep-Raising in the Stepok

Gosplemzavod

Indicators	Average for 1971- 1972 (be- fore intro duction)	1979	1978- 1979 in % of 1971-1972
Number of employees engaged in sheep-	•••	1 .	
raising Number of animals serviced by one	104	111	106.7
sheep raiser	191	221	115.7
Wage Fund for the branch as a whole, thousands of rubles	201.4	237.6	117.9
Material Incentive Fund, thousands of rubles	23	33	143.4
Total payments to sheep-raising employees, thousands of rubles	224.4	270.6	120.5
Average annual wages per employees, rubles Bonuses obtained per sheep-raiser in a	1937	2141	110.5
year, rublesGross output from sheep-raising, in	222	280	126.1
comparable prices, total in thousands of rublesper employee in rubles	1037 <b>.</b> 4 9975	1304.6 11754	125.7 117.8

A 6.8 percent increase in the number of sheep-raising employees was accompanied by a 15.7 percent increase in the norm for the number of animals serviced by a worker; as a result, labor productivity in this sector increased by 17.8 percent, while wages per employee increased 10.5 percent. One striking figure is the rather high absolute size of the gross production output per sheep-raiser; in 1978-1979 this amounted to an average of 11,754 rubles in contrast with 9,975 rubles in 1971-1972, that is, before the sovkhoz shifted to the experimental conditions.

In accordance with the conditions of the experiment, sovkhoz specialists worked out scales for bonuses to be awarded to brigades and farm units for

the quantity and quality of output depending on whether the level achieved in the preceding three years had been exceeded. For example, in sheep-raising bonus scales were developed for the following: large amounts of wool sheared, an increase in the number of lambs per 100 ewes, safe keeping of the young and a high weight of lambs when they are taken away. The bonuses are provided from a single source: the material incentive fund which is formed on the basis of the two norms mentioned above.

Thus, the Shchekino experiement, which is being carried out at the Stepok Sovkhoz, has in general proved itself. It has created the necessary conditions and prerequisites for successful operation of the sovkhoz. The problem is that the existing rate system does not always make it possible to organize correctly the material incentives awarded to employees. In a number of farms there is a significant gap between the rates and actual earnings. At some farms the ratio between the rate and actual earnings has amounted to 1:2.5 for milkmaids: 1:1.9 for cattle workers, 1:1.23 for workers in pig-raising, 1:1.7 for drivers, 1:1.3 for tractor drivers and equipment operators on the fourth step of the scale for piece workers) and 1:1.7 for horse-training work (at the rate of the fourth step for piece workers). The existence of permanent rates for the various categories of work (or workers), and the fact that the categories do not have any "prongs" or branches makes the rate system inadequately flexible; it does not provide for any link between itself and the growth of labor productivity. An increase in the load on workers is not accompanied by a corresponding increase in the rates. Under these conditions it is difficult to apply technically-grounded norms. Under the conditions of the Shchekino experiement, this substantial inadequacy is eliminated to a certain degree by planning wage norms per unit of output.

A positive aspect of the Shchekino experiment in the Stepok Sovkhoz is that during the course of the experiment, the basic plan indicators for the development of production became more intense.

At the same time, the experiment is not without certain inadequacies. In particular, due to the lack of a scientifically-based methodology for planning agricultural production, the plan indicators in certain years may prove to be too low or too high not by design and not because of the material interests of the sovkhoz employees, but due to the impossibility of taking into account all the factors which influence production, such as, for example, the climatic conditions of a specific year. Under the existing method for the provision of material incentives, a certain unevennessin bonus payments is observed. The main reason for this, in our opinion, is the sliding three-year level of comparison. This means that if there is one bad year for weather, then the collective is guaranteed bonuses in the subsequent years.

<sup>1.</sup> F.G. Arutyunyan and N.V. Kuz menko, "Shchekinskiy experiment v sovkhozakh" The Shchekino Experiment in Sovkhozes, Moscow, Rossel khozizdat, 1975.

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<sup>8543</sup> CSO: 1828/195

#### DISCUSSION OF SHCHEKINO EXPERIMENT CONTINUES

#### Officials Discuss Shchekino Method

Moscow PRAVDA in Russian 14 Jun 82 p 3

[Article summarizing discussion of the PRAVDA Business Club: "New Acceleration for the Shchekino Method"]

[Text] Comrade L. I. Brezhnev referred to the method of raising labor productivity worked out by the Shchekino chemical workers, whose slogan is "More Output With Fewer Personnel," as a "magnificent movement." This effective method, which has been approved by the CPSU Central Committee, has been in effect and has been developing for 1.5 decades now. It has been applied in the various sectors of the economy.

The decree of the CPSU Central Committee and USSR Council of Ministers dated 12 July 1979 on further improvement of planning and the economic mechanism truly gave the Shchekino method a second wind. The many years of experience of the Shchekino people and their followers is of particular interest in this connection. It indicates the fruitfulness of taking the comprehensive approach to raising labor productivity, production efficiency and quality and is an important factor in the socioeconomic education of the workers. The regular meeting of the PRAVDA Business Club was devoted to the place and role of the Shchekino method in the system of the present economic mechanism and to the problems of its further development. The following topics were discussed:

- i. Realistic and potential capabilities of the Shchekino method as an effective means of raising labor productivity.
- ii. In what direction should the Shchekino method be developed?
- iii. The principal obstacles in the way of large-scale dissemination of this method. Ways of removing them.

Party officials, enterprise directors and economists, scientists, ministry officials, top-level representatives of the economic administration--USSR Gosplan, USSR Goskomtrud [USSR State Committee for Labor and Social Problems], and also the AUCCTU--express their opinions on these and other topics.

### From Experiment to System

The participants in the meeting were first of all interested in the following questions: How widespread has the Shchekino method now become, and what has it given to the national economy?

The statements made by Deputy Department Chiefs of USSR Gosplan and USSR Goskomtrud V. K. Moskalenko and S. G. Semin, Deputy Minister for Production of Mineral Fertilizers V.K.Borodin, Administration Chief of USSR Minkhimprom [Ministry of Chemical Industry] A. A. Zhdanovich, Deputy Department Chief of the AUCCTU E. V. Minin, Department Head of the AUCCTU Higher School of the Trade Union Movement A. D. Gusakov, First Secretary of the Shchekino City Party Committee G. N. Grotseskul, Department Chief of the Tula Oblast Committee of the CPSU V. V. Semenov, and others helped to represent the scale and effectiveness of the movement.

Up to the beginning of the present 5-year period various measures had been carried out to raise labor productivity and increase the volume of production with fewer personnel by 9,300 production associations and enterprises employing more than 18 million persons. In just the 10th Five-Year Plan as a whole 968,000 job slots were eliminated in industry, or 6 percent of their total number.

As in the past, the example was set by the pioneers of the method--enterprises of the ministries for the chemical industry and for the production of mineral fertilizers. Collectives of these sectors eliminated more than 60,000 job slots over all the years the Shchekino method has been in effect, which made it possible for them to staff about 450 new facilities with qualified workers and specialists. By the end of the current 5-year period plans call for eliminating yet another 20,000 or more job slots in the chemical branches.

As in the past, the performance of its initiator—the collective of the Shchekino association Azot—has served as convincing advertisement for the method [the accompanying diagram gives the following performance indicators for the Shchekino production association over the period from 1967 to 1981: growth of output 3.1—fold, growth of profit fivefold, rise of average worker wage 66.7 percent and rise of labor productivity 4.1—fold]. In the years of the experiment 1,814 job slots were eliminated in the association, the savings on the wage fund was about 16 million rubles. Even now the Shchekino people are not giving up the lead. On the basis of performance in 1981 the association was awarded the challenge Red Banner of the CPSU Central Committee, the USSR Council of Ministers, the AUCCTU and the Komsomol Central Committee.

Excellent indicators, especially in the first stages of the experiment, have been obtained by the Shchekino people's nearest runners-up: the Novomoskovsk

association Azot, the Tula Machinebuilding Plant imeni Ryabikov, the NPO [Scientific-Production Association] Tulachermet, the associations Bashneftekhim-zavody, AvtoKrAZ, Moscow Electric Lamp Plant, and many others.

The list of enterprises representing various branches indicates the method's universality. References to the specific nature of branches, their production technology and their pattern of operation have become unfashionable.

This is indeed understandable. All the basic elements of the Shchekino method were incorporated in the system of measures to improve the economic mechanism. To be specific, according to the decree of the CPSU Central Committee and USSR Council of Ministers dated 12 July 1979, new incentives are envisaged for all work collectives: long-term wage standards per ruble of output; an increase of the supplement for combining occupations; crediting the unused part of the wage fund saved to the material incentive fund at the end of the year, and others.

But perhaps under these conditions the Shchekino method has played itself out and has therefore "gone into retirement"?

We put the question to the father of the experiment—to Petr Mikhaylovich Sharov, former director of the Shchekino Chemical Combine, Hero of Socialist Labor, and recipient of the USSR State Prize. Now enjoying a deserved rest, he heads the section for dissemination of the Shchekino method of the party gorkom and as before is striving vigorously to develop it.

P. M. Sharov: The question is not a new one. It was in fact put 10 years ago, when the supplements for combining occupations were permitted. Then the top officials of many ministries and departments and economic officials at the lower levels also considered the method exhausted, since they reduced it to the oversimplified formula: "Cut back and pay a supplement." They supposed that the process of reducing the number of personnel would proceed automatically, and they ceased to require of enterprises that they draft comprehensive organizational and technical measures to increase output with fewer personnel. At that time planned and painstaking work to lower labor costs almost ceased. And only the persistence of party organs and the instruction of L. I. Brezhnev to pay closer attention to the Shchekino method helped to revive the great cause.

There is a danger of a new slackening of the planned effort even now. Even if the principles of the Shchekino method were made the law of the land, in and of themselves they would not operate automatically.

Here is the opinion of A. L. Mirgaleyev, administration chief of RSFSR Goskomtrud:

"Petr Mikhaylovich is right. When the elements of the Shchekino method were introduced into general practice it was supposed that under ordinary conditions it is possible to achieve the necessary result in reduction of labor costs per unit output. It is, of course, possible. But over what length of time? The statistics show that in the year after publication of the decree of

the CPSU Central Committee and USSR Council of Ministers on the economic mechanism about 1 percent of the job slots were eliminated in RSFSR industry thanks to the combining of occupations and an increase in the volume of work. But in associations and enterprises applying the comprehensive method of improving the organization of work, financial incentives and planning in the Shchekino way, this figure is half again as great. There are advantages."

During preparation for the transition to adoption of the Shchekino method reviews and competitions for the best proposals were held. Questionnaires were distributed to all the workers asking them to indicate where and at what work station and in what ways the volume of output could be increased without increasing the number of workers. Scientists and specialists were enlisted to analyze the potential capabilities of the enterprise. Organizational and technical measures worked out collectively enhance responsibility for their performance.

Examples were given in the meeting of the business club of a creative approach to use of the Shchekino method and to its development and improvement. The experience of the chemical workers at the Kalush association Khlorvinil is interesting; they introduced a more flexible and objective system of intraplant planning. In the Novopolotsk production association Polimir the Shchekino method has been organically combined with the work-team organization of work. The Bashkir petrochemical workers, on the other hand, gave preference to the principle of individual responsibility for attending processing units, invariably requiring interchangeability, and they also obtained excellent results.

Consequently, wherever the Shchekino method is not only a theory, but real full-fledged practice, it remains an effective factor in economic development. Incentives for improving it still exist and are even becoming stronger. But they do not operate in and of themselves, without a vigorous educative and organizational effort by party and trade union organizations and managers.

For all the effectiveness and universality of the Shchekino method, and even though it seems to have been introduced widely and on a large scale, it must be faced as a plain fact that today in RSFSR only 6 percent of industrial enterprises are operating fully in accord with the Shchekino method. That is indeed much the situation for the country as a whole.

At the present time, when the basic principles of the Shchekino method have been organically woven into the fabric of the decree of the CPSU Central Committee and USSR Council of Ministers dated 12 July 1979, it can be said that they have won their fullest recognition and approval. But why is introduction of the Shchekino method still a rather difficult and slow process? This question became the pivotal point of the conversation and aroused discussion.

New Status, Old Practice

Nikolay Romanovich Melent'yev, director of the Shchekino association Azot, remarked that from the outset the experiment was based on "three pillars": a production plan which remained stable for a number of years, a wage fund that would be as frozen over that same period, and the specific right to dispose of

the portion of the wage fund which has been saved to pay incentives to workers for intensification of work.

The Shchekino chemical workers had these guarantees at the very beginning of the method's evolution. Then the usual adjustment of plans and funds began. And the Shchekino people, who have the best production figures in the branch, found themselves to be in an extremely difficult financial condition. The saving on the wage fund achieved by the end of the year narrowed the "base" for the new plan, and the fund for each successive year proved to be truncated. In the years of the 9th Five-Year Plan the wage fund dropped 3 million rubles. The result of this was that when the new salaries and wage rates were introduced in 1975, the combine was forced to abolish supplements and premiums awarded to 1,700 workers because of the shortage of funds. During the last 5-year plan the planned wage fund of the Shchekino workers was reduced by 1.3 million rubles.

V. K. Moskalenko, deputy department chief of USSR Gosplan:

"That is an exceptional case...."

Now the Shchekino principles, N. R. Melent'yev noted, are being specifically confirmed in the new decree concerning the economic mechanism, which provides for taking into account the cumulative result in fulfillment of annual and 5-year plans. It is forbidden to adjust plans, and the wage fund must be determined on the basis of firm standards in effect for a lengthy period of time. Collectives have the right to dispose of the wage fund which has been saved.

A voice in the room: How are those points of the decree being implemented?

"Slowly and inconsistently. Unfortunately, the old practice has persisted even after adoption of the decree...."

A. N. Klimenko, director of the Shchekino Synthetic Fiber Plant; Ya. N. Gabidullin, deputy general director of the association Bashneftekhimzavody; S. Z. Kossoy, deputy director of the Tula Machinebuilding Plant imeni Ryabikov; V. M. Bobrovnik, deputy general director of the Novomoskovsk association Azot; A. G. Ageyeva, chief economist of the Shchekino Plant for Repair of Processing Equipment; and others who spoke in the meeting said that frequent adjustments of the wage fund and of the standard governing its formation are continuing.

The situation is much the same in other regions. For example, the managers and work force of the Lermontov Artistic Weaving Factory (Stavropol Kray) decided to make the conversion to the Shchekino method in April 1980. Three months later the enterprise adjusted the wage fund, and the factory continued to operate in the old way. Certain rayon associations of Sel'khoztekhnika have found themselves in a similar situation. The collectives of these enterprises began to operate in a new way after a lengthy preparation. But stable standards for formation of the wage fund were not assigned to them, and the effort in conformity with the Shchekino method came to an end.

Even such a large association as AvtoKrAZ "fell" from the ranks of the Shchekino imitators in a similar way. It had been the first in the motor vehicle industry to adopt the Shchekino method and achieve high results. The 5-year assignment for growth rates of the volume of output and labor productivity were fulfilled 2 years ahead of schedule. But Glavgruzavtoprom [Main Administration for Truck Production of the Ministry of the Automotive Industry] abolished the wage standard per ruble of sales previously assigned to the enterprise and thereby essentially brought the experiment to an end. In the 3 years that followed, when the planning of labor indicators "from past performance" was reestablished, the growth rates of the association AvtoKrAZ dropped sharply: to one-half for the volume of output and to two-fifths for labor productivity.

N. R. Melent'yev: The practice of making adjustments is continuing even to-day. Even though provision has been made for drafting and approving long-term wage norms. But this indicator has not been introduced, and the wage fund is still determined in the old way: on the basis of the level of the average wage and the size of the work force in the past. That is why the Shchekino method can really get a "second wind" only after full and comprehensive introduction of all the measures envisaged by the decree of the party and government.

Someone in the background: Why is the decree not being carried out?

V. K. Borodin, deputy minister for production of manufactured fertilizers: The "floating" norms—these are the costs of an unstable production plan. A state plan that is stable and straightforwardly balanced with respect to physical and labor resources is an invariable condition of normal economic activity. But what is quite often the case in practice? The enterprises of our ministry confront a large task—in 5 years to increase the output of manufactured fertilizers by 48 percent. The plan is strenuous and ... unbalanced.

In order to meet the target 84,000 men will have to be hired, even if we take into account the introduction of advances of science and technology. The growth of our labor resources was planned only at 21,000 persons. We ask: If there is no reserve manpower, at least preserve the wage fund. They are refusing to give us about 280 million rubles to which the wage fund is entitled according to the calculated norm. How is it possible to carry on a program of agitation for collectives of enterprises in the branch to develop the Shchekino method further if by an act of will we introduce elements of the Shchekino method by reducing the size of staff and the wage fund in advance? Thus for all practical purposes we must achieve the entire growth of the volume of output by raising labor productivity, but unsupported by any financial incentive. Sensible rules and regulations are a good thing, but when they go too far they are a brake on the creative activity of collectives, they generate apathy, and they stand in the way of development of a spirit of socialist enterprise.

That is why I support those participants in the meeting who have noted that the wage fund must be appropriated, as indeed the decree of the party and government provides, in accordance with the volume of planned output so as to

take into account the labor intensiveness of products, rather than on the basis of the number of people employed and their average wage. It turns out that we all reject leveling in theory, but in practice the orientation toward averaging out remuneration is still evident as a practical matter in many normative acts. This is nothing other than a breach of the economic law of distribution according to work. This approach corresponds in large measure to the period when the task was to ensure employment of the entire population of working age. Now the situation with labor resources has changed radically, it requires an appropriate adjustment in the mechanism for applying the principle of distribution according to work, including unfailing consideration for the Shchekino method: more output with fewer personnel.

V. K. Moskalenko: Yes, the strain on the supply of workers does demand that we in USSR Gosplan, in compiling 5-year plans, reckon in advance on the possibility of combining occupations and development of work-team forms of the organization of work and other reserves for saving on labor resources. Even to-day industrial enterprises are falling short by hundreds of thousands of the staff limits assigned them. That is the demographic situation. That is why it is important to seek out not only labor reserves, but also ways of using them with maximum efficiency.

P. M. Sharov: We need to talk about labor productivity, not the demographic situation. The reason for the shortage of labor sources is not the low population growth, but the slow reduction of labor costs, the low growth rates of productivity. That is in fact why the experiment at Shchekino was initiated: to increase the volume of output without increasing the number of workers thanks to better organization and better work incentives, modernization of equipment and technology. Placing obstacles in the way of the Shchekino movement signifies artificially aggravating the shortage of labor resources....

There are still quite a few such obstacles, just as before, it was noted in the meeting of the club. One of the serious causes compelling managers to be wary of the Shchekino method is the present practice of assigning targets for reduction of the number of administrative and supervisory personnel. There is a great deal of leveling here: the reduction is being made regardless of the proportion of engineering and technical personnel and employees in the total number of personnel. Given that situation, any manager in the economy reasons much in this fashion: Why hurry to eliminate job slots for workers in this category, when tomorrow I will be given an additional target for reducing their number?

Opinions converge concerning the need for this kind of revision: Enterprises which have adopted the Shchekino method should not be assigned a target for reduction of supervisory personnel if the number of engineering and technical personnel and employees is no higher than envisaged by branch norms. And still better--principles of the Shchekino method should be extended to the work of managers, engineers and scientists.

#### Vertical and Horizontal

The normative net output indicator is becoming one of the important elements of planning in the present economic mechanism. It is being used to record more objectively every collective's labor contribution to carrying out the plans of the 5-year period. Now the NChP [normative net output] indicator is being used by dozens of branches and thousands of enterprises. In other words, it is being applied at present in a cross section of branches, on a "vertical" basis.

But in regional planning, on a "horizontal" basis, the principal indicator still remains the "gross," that is, the volume of sales. It is the basis for breaking down the plans of cities, oblasts and republics. In both the party obkom and in Gosplan they ask for the sales plan in rubles, participants in the meeting said, and the plan for NChP seems to exist on a voluntary basis, and the duality of criteria for assessment of performance is perpetuating the disorder.

V. V. Semenov, department chief of the Tula party obkom: My colleague from Voronezh spoke correctly about the contradictions between sectoral and regional planning at the previous meeting of the PRAVDA Business Club. Here is the kind of thing that is happening. The supreme headquarters of the branch requests from the enterprise a report on normative net output, while the local agencies ask for the sales plan. Party gorkoms and raykoms are compelled to assess the performance of enterprises according to the old indicators, since they are still the main ones for regional planning.

We should add that the discrepancy between the "vertical" and "horizontal" in planning is as though projected onto the principles of introducing the Shchekino method, substantially hindering improvement of its effectiveness. Probably the most urgent issue for the present stage of the Shchekino movement was raised at the session of the club. Up to now the method's development and introduction have also proceeded exclusively on a "vertical" basis—in each branch separately. People in the Shchekino party gorkom have noted: The efforts of the chemical workers to eliminate job slots have in a sense been nullified. People have moved to other enterprises where their labor has been utilized less optimally. The acuteness of the problem of labor resources in the city has not been diminished.

It was at this point that the problem was posed of bringing all the city's labor resources into balance with the national economic plan. In other words, an attempt was made to introduce the Shchekino method even on a "horizontal" basis—on the scale of the city.

G. N. Grotseskul, first secretary of the Shchekino party gorkom: What did we succeed in doing? Today practically all of the city's enterprises are working according to the Shchekino method. They account for about 90 percent of all the industrial output. Enterprises in the consumer service sector, in trade and in transportation are operating according to the same principle. Now the city's labor resources have mainly been brought into balance. In Shchekino there is no general shortage of labor. This is a very considerable achievement.

We have now set the task of balancing labor resources in rural areas as well, that is, on the scale of the entire rayon. We will strive to prove that introduction of the Shchekino method is possible and necessary not only within a single enterprise or branch, but on the scale of a regional complex such as the city or rayon. It is under these conditions that the Shchekino method reveals its true capabilities.

- P. M. Sharov: Even in the stage of the experiment we supposed that the struggle for intensification of labor processes would be difficult and would have low results at such a separate "islet" as the enterprise. People can simply go where they can "be lazy" for the same wage. Now that we have become concerned with the regional balance of labor resources we have arrived at the idea that even the rayon is also a tiny island.
- V. V. Semenov: Petr Mikhaylovich's idea deserves close attention. It seems to us that if ministries, USSR Gosplan and other central departments showed a certain interest and provided help it would be possible to begin the experiment of introducing the Shchekino method on the scale of an oblast or kray. Tula Oblast would be interested in this, since the problem of labor resources is extremely acute here. In the last decade there has been a trend toward an absolute reduction of the population. In the near future a reduction of another 100,000 persons is forecast. Can industry function normally if this forecast is borne out?

It can. But only if there is a strong development of the productive forces, if new implements of labor and processes are introduced in combination with new forms of economic activity. The oblast balance of labor resources on the basis of the Shchekino method would become a strong point of support here. The regional principle of its introduction would unquestionably help to seek out optimum points of intersection of the vertical and horizontal—would contribute to consistency between sectoral and regional planning and to improvement of the oblast's entire economic mechanism.

S. Z. Kossoy, deputy director of the Tula Machinebuilding Plant imeni Ryabikov: It is evident that the straightforwardness and complete definiteness of the rights which have been won by the Shchekino method are not to the liking of certain planning and economic agencies. It has meant more responsibility and additional work. Norms have to be calculated, funds have to be sought out, the growth of labor resources and the need for them have to be forecast. The maneuvering begins, and there is a search for easy ways out.

The deeply rooted practice of including among the followers of the Shchekino people those who are applying individual elements of the method was unanimously condemned in the meeting of the business club. For example, only the supplements are introduced for combining occupations.

G. N. Grotseskul: Tearing apart the experiment into its individual elements is an alarming system. The method is effective only if the parts are kept together: planning, organizing and encouraging strenuous work. Those who apply isolated elements of the method achieve little benefit, but they make a lot of noise. The statistics on followers of this method have been basically

embellished by figures on those who apply only part of the method. After all, the Shchekino method in its full extent, as noted by N. R. Melent'yev, is not at present being applied at the enterprise which engendered it because of adjustments of plans and the wage fund.

A. A. Zhdanovich, administration chief of USSR Ministry of Chemical Industry: I agree entirely with Grigoriy Nikolayevich. The only effective way is comprehensive application of the Shchekino method.

A. L. Mirgaleyev: The introduction of individual and random measures results as a rule from current rather than long-range interests. This has nothing in common with the Shchekino method. Is it sensible to replace the method of the Shchekino people, which has been tested and approved, with local initiatives that have a similar external appearance?

The Shchekino method is still at work. Its basic principles are reflected in the decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism and have become still more effective instruments of the economy. But by themselves they will not advance the method. There is a need for vigorous and purposive educative and organizational work by party committees and all levels of administration and management.

Meeting's Conclusions, Proposals Summarized

Moscow PRAVDA in Russian 14 Jun 82 p 3

[Article by D. Valovoy, A. Nikitin and V. Shvetsov, special PRAVDA correspondents, Shchekino, Tula Oblast: "Conclusions, Proposals and Decisions"]

[Text] The main conclusion and main proposal formulated by the participants in the meeting are these:

The experience of the Shchekino City and Tula Oblast committees of the CPSU in systematic and comprehensive introduction of the method at enterprises and different branches of industry and in the nonproduction sphere deserves thorough and comprehensive study and dissemination. Proposals were made to create nonstaff departments in party committees and cost-accounting (khozraschet) economics laboratories in regions.

It was proposed that trade union organizations, especially oblast committees, be given greater responsibility for development of the Shchekino movement. Specifically, the remark was made: the method needs to be introduced more rapidly at enterprises of machinebuilding by overcoming the passive attitude of the trade unions of the respective branches.

There is a need to draft stable production plans balanced in physical and financial resources and to safeguard them from arbitrary corrections. Every adjustment of an assignment is extremely undesirable for an enterprise which has adopted the Shchekino method. And if a real need arises? A state reserve of raw materials, supplies and energy resources is necessary for such cases. It is to be used to overcome unforeseen difficulties.

The participants in the meeting proposed faster progress in improvement of the economic mechanism and on that basis, to be specific, improved discipline in the planning of the wage fund, and establishment of norms which for all practical purposes are stable for fixed periods of time. Violation of this principle of the Shchekino method has always had a baneful effect on its development.

The procedure for distribution of the saving on the wage fund also needs to be reviewed. At present it goes for supplements and bonuses. In the years of the most active development of the Shchekino method part of the undistributed saving of the fund was used by the chemical workers for collective social welfare measures. There is a point, the economists have said, in going back to the old experience where the opportunity exists to improve the social conditions of the workers' life with those funds. This will make it possible, say, to develop a network of plant health centers, collective and personal farming plots of the workers, housing construction, including private and cooperative housing construction. In other words, it is a question of flexibility in use of that portion of the wage fund which has been saved and of fuller recognition of local conditions.

In Shchekino the question was raised of introducing benefits for workers who combine occupations in sections with harmful working conditions. In this connection USSR Goskomtrud and the secretariat of the AUCCTU has adopted a specific decree, No 106/6-34 dated 11 May 1982, on procedure for retaining the right to a state pension under preferential conditions and at a preferential level for workers who are members of mixed teams.

Many participants in the club also spoke about the need to introduce a supplement for development of the Shchekino method to be paid to the management level at enterprises; about issuing normative documents; about enlisting scientists to thoroughly analyze the Shchekino movement. These proposals deserve serious attention.

Scientists propose that as an experiment the production enterprises like the Shchekino and Novomoskovsk Azot associations be converted to full cost accounting along with introduction of the normative procedure for distribution of profit, and, if necessary, the granting of long-term credits. This would give work collectives a still greater interest in the final results of their strenuous work and would make it possible for enterprises to dispose of the funds they have earned.

As the initiators of the movement have themselves stated, the Shchekino method will be only a temporary phenomenon in the life of the collective if organizational measures are not backed up by a concrete and long-term program for reconstruction of production, for modernization of equipment, and for automation of laborious processes. There are two types of potential. The first, as they say, is on the surface: in some places there are redundant workers who need to be made available for other work. The other kind of potential is reducing the number of jobs through continuous technical improvement of production. This is a lasting process, and the fullest possible advantage needs to be taken of it.

It was also proposed that another important circumstance be taken into account. Enterprises operating according to the Shchekino method are achieving a growth of output and a rise of labor productivity mainly through intensification of the existing production operation, without large appropriations for new construction. Consequently, they are also being deprived of appropriations for the construction of housing and facilities for social, cultural and consumer services. This is the reason, for instance, that during the last 5-year period the chemical workers of Shchekino did not receive a single housing unit. It is clear that a particular correction is needed here.

At the meetings of the business club in Moscow, Voronezh and Shchekino, as well as in a number of articles published by PRAVDA the issue was raised sharply of contradictions between the sectoral plan for NChP [normative net output] and the regional plan based on the "gross." Taking these remarks into account, Gosplan and the USSR Central Statistical Administration have recently sent to ministries and departments and local planning and statistics agencies a letter (No 04-102) in which an attempt is made to diminish this contradiction.

The gist of the letter is that if an enterprise has fulfilled the plan for NChP, but not for the volume of sales, then it is the latter that is recalculated in regional reporting. How? According to the level of plan fulfillment on the basis of normative net output. The letter, of course, does not fully solve the problem that was posed. But in some stage it could possibly play the role of a transitional version.

Unfortunately, attention has not yet been paid to the criticism of USSR Gosbank institutions which has been expressed in meetings of the PRAVDA Business Club. Many of them are refusing to grant credit to a customer when he is temporarily without funds to pay for a product he has received, which is a violation of Point 57 of the decree. Normative documents adopted even after the decree of the party and government on the economic mechanism have indeed envisaged opportunities for refusals of this kind.

There must be no delay in comprehensive improvement of the economic mechanism, and no occasion should be given for its unjustified criticism. Yet certain economists are already "specializing" in discrediting normative net output as an indicator which supposedly has not manifested itself. But there is no way it could have manifested itself, since so far it has been in the position of a probationer under the "gross," which as before is the main indicator of production activity. The NChP is still like the "user of one element" in the Shchekino method. Yet the NChP, just like the Shchekino method, is an integral part of that economic mechanism which needs to be introduced both "vertically" and also "horizontally."

The Shchekino method is a powerful instrument for raising production efficiency and the quality of performance. Party organizations and managers in the economy need to devote a great deal more energy to remove the obstacles in its way. It is their duty to mobilize work collectives for comprehensive introduction of the experience of the chemical workers. The struggle for further development of the Shchekino method is a struggle for improvement of the economic mechanism.

# Work-Team Experience Recounted

Moscow EKONOMICHESKAYA GAZETA in Russian No 20, May 82 p 8

[Article by A. Sandrovskiy, deputy general director for economics, Kotlas Pulp and Paper Combine, Arkhangel Oblast]

[Text] The Kotlas Pulp and Paper Combine was one of the first in the branch to operate according to the Shchekino method. In making the transition it first had to put things in order with work norm setting, with expansion of service zones, and with combination of professions. We also immediately introduced financial incentives for fulfillment of larger amounts of work with fewer workers. In the next stage the enterprise's specialists concentrated their attention on revising the norms in effect and on introducing norms for time-rate workers as well.

Over the entire period of operation by the Shchekino method we have managed to save the labor of 1,702 persons and raise labor productivity 45.5 percent. As much as 20 percent of the annual saving of the wage fund achieved by reducing the number of workers is now being used for lump-sum awards to workers, foremen, chiefs of shifts, shops and production operations, and to those actually participating in drafting and carrying out measures to reduce the number of workers and to raise labor productivity.

This effort is continuing even today, but it is being made under qualitatively new conditions. As emphasized at the 26th party congress, in order to raise labor productivity the work-team form of the organization of work has to be persistently introduced, norm setting has to be refined, and the role of the wage as an incentive has to be strengthened. We have acquired a certain experience along those lines.

The creation of work teams, which work on the basis of a single job order and apply KTU [work participation coefficients], was preceded by painstaking work of the combine's staff services in the field of economics. The scientific management laboratory, for example, provided the production subdivisions with methods materials and drafted recommendations for computation and distribution of the collective earnings among the members of the team using the KTU. The labor and wages department, jointly with the personnel department, drafted a program for technical training of team leaders, for improvement of the qualifications of workers, and for them to acquire related occupations. The staff of the planning and economics department concerned itself in turn with the introduction of work-team cost accounting.

In our basic production shops the work teams are given monthly and quarterly assignments for the following indicators: output in physical terms, output of the top varieties and grades, and the amount of physical and energy resources consumed. For the repair work teams, and the combine has 93 of them, totaling more than 1,000 persons, the volume of production is planned in quota-hours, an assignment is given for the rise of labor productivity, and the wage fund is set.

The sharp reduction of personnel turnover and reduction of losses of work time are evidence that the work in the work teams gives the worker satisfaction.

Reality is demonstrating that a very great deal depends above all on how properly the work is organized in the work teams. And this is where problems arise which in our view need to be solved in the very near future. For example, the improvement of planning. The aggregate of the plans of our work teams does not yet correspond to the plan of the enterprise by any means. And this is why.

Fulfillment of the production plan, as is well known, is unthinkable without the appropriate physical resources. But not uncommonly suppliers do not meet their assignment for objective or subjective reasons, and consequently they let the consignee down as well. For example, the plan for deliveries of raw materials and basic chemicals to the combine is often fulfilled at a level of only 70-80 percent. In the combine as a whole we have found a way out of this situation, though with difficulty. As for the work teams, the plans broken down to their level in terms of volume and quality must unfailingly be backed up fully with the physical resources, and that is why we must refrain from compiling long-term programs for the work teams. We limit ourselves to issuing them only monthly, and at the most quarterly, assignments. If a reliable internal consistency were achieved in the combine's plan for the 5-year period, then it would also be possible to bring the work of the work teams under long-term planning.

The work-team plan must be stable. The extremely frequent assignments which the ministry gives to the enterprise and refers to as "supplemental" are also unnatural for the work teams.

We are also disturbed by this question. For example, we say to the work teams: this year the allowances for expenditure of raw materials have to be cut back by 3 percent from last year. But the workers know quite well that even today we are consuming 3.95 cubic meters of softwood per ton of sulfate pulp, while the rate of consumption at the Arkhangel Pulp and Paper Combine, the same kind of enterprise, is 4.5 cubic meters. Figures per ton of cardboard are 1,055 kg of fiber and 1,065 kg, respectively. And the question is who has an easier time cutting back on the allowance for expenditure of the raw material: us or the Arkhangel workers? It would seem that the technically sound allowance for consumption of the raw material ought to be the same for all those working under the same conditions. And, of course, the reward should go to those who achieve a reduction of those rates of consumption without detracting from the quality of the product.

Nor can the work to improve management of the work teams be considered finished. At present it is not uncommon even for our own shop chiefs, foremen and other supervisory personnel at the middle level to "command" individual workers, not even letting the work-team leader know. This will not work. The opinion of the work-team leader and the opinion of the council of the work team must be regarded as decisive, for example, in advancing nominees for prize places in a competition, in determining an incentive for performance of especially important work.

Use of the work-team form of organization and work incentive is constantly facing economists with more and more new problems. In the past, for instance, the question never arose of how we would use students from the city vocational-and-technical school who have come to get experience. Now their inclusion in work teams is noticeable in the performance indicators of the teams. They spend half a year getting production experience in teams which may even be fully staffed, and after that they are awarded their third-class certificate. But for the team students from the city vocational-and-technical school sometimes become a burden. That is why future production workers, and there are quite a few able kids among them who like their work, feel themselves to be strangers in the team, and this bothers them psychologically.

The time for popularizing the work-team form of the organization of work has already passed. There is hardly any need today to convince anyone that it has advantages over individual piecework. The most convincing thing is that by using the work-team method as an instrument we are gaining important opportunities for improvement of the economic mechanism as a whole. And workers who have become established in their collectives feel themselves to be real masters of production and vigorously display their ability in managing them.

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LABOR

PARTY ENCOURAGES BRIGADE LABOR ORGANIZATION

Moscow PARTIYNAYA ZHIZN' in Russian No 13, Jul 82 pp 59-64

[Article entitled: "Party Organization and the Development of Brigade Forms of Work]

[Text] In the conditions of the consistent transfer of the economy of the country to a primarily intensive path of development, an increasingly large place in national production is occupied by the brigade form of labor organization and incentive, which is called upon to become the basic form during the current five-year-plan. Today's extramural seminar is dedicated to the participation of the party organizations in its development. In the past the journal has published quite a few materials on this subject, and in the eighth issue for 1982 a selection of communications reflecting the specific nature of the use of the brigade method in different sectors of the national economy. However, many questions of general interest and unresolved problems remain which bear on this subject. And the editors are inclined to return to their discussion repeatedly.

In meeting the 60th Anniversary of the Formation of the USSR, the Soviet people note with pride that with every day our country is making more energetic and extensive progress in economic and social construction and in the practical realization of the historic outlines of the 26th CPSU Congress. And in this step forward one finds the visible manifestation of the active and creative force of the working class, exerting a powerful influence on the ideological and cultural development of the entire Soviet people.

The people of labor in our country are the genuine masters of their state. And the successes of communist construction to an increasing degree depend on their labor and creative activeness. "The policy of the party towards the intensification of national production and the increase of its efficiency by all conceivable means," it is stated in the decree of the CPSU Central Committee on the 60th Anniversary of the Formation of the USSR, "requires a high degree of organization, efficiency and discipline, the precise and well-organized functioning of administration, and the development of the creative initiative of the masses."

During the recent past qualitatively new facets have clearly appeared in the professional and spiritual development of the working class of the Country of Soviets, facets which are also connected with the activity of the production brigades, working in accordance with a single order. This movement has a bearing not only on the production sphere. In it are manifested the innovator's search, real achievements, as well as new moral and socio-psychological traits of the socialist personality, dictated by the very atmosphere of these primary cells of the work collective.

The collective forms of labor organization were called into being by the growth of the demands of national production, as well as by the increase in the educational and cultural level of people. As Comrade L. I. Brezhnev noted in his speech at the 16th Congress of USSR Trade Unions, the brigade forms of labor organization and incentive "fully correspond to the economic strategy of the party during the contemporary stage." They promote the solution of economic and social tasks, the development of democratic principles in administration, the strengthening of labor discipline, the increase of creative initiative, the development of collectivism, and the communist attitude towards work. When the brigade method of work is used, the work itself becomes more interesting, time and equipment are used more efficiently, and on this basis output is increased and the quality of the production being turned out is improved.

Economic practice provides numerous examples of the high efficiency of the work of collectives which have gone over to the brigade method. Thus, the investigation of a number of enterprises showed that labor productivity in sectors where they work according to this method is increased by 10-25 percent. During the two years after it was introduced, the turnover of cadres in the corresponding subdivisions decreased to almost a third maximuch, tardiness and loafing—to a sixth as much, and intrashift losses—to half as much.

Brigade forms of labor did exist previously, but in them the principle of individual piece-work prevailed: How much everybody worked, so much he received. And no matter how high the individual initiative of the worker was in this connection, or his conscientiousness and his unselfishness, such an organization of work nevertheless was not oriented towards a concern with the collective as a whole, with the final results of production. It is a different matter when the brigade manufactures a certain unit of a machine and when the wages of each depend directly not on the quantity of individual gears or screws, but on how many units are produced during a 24-hour period, a month or a year. In the new conditions, the brigade becomes competent link in the system of the administration of the socialist enterprise. It plans basic quality and quantity indicators of work and establishes norms for the expenditures for the output of production. This also creates objective prerequisites for the more active participation of the workers in the solution of economic problems and stimulates the increase of their economic and political knowledge.

Life itself has filled the former labor organization forms with new content. And this new content has been embodied in the movement of brigades of single duty, which has announced itself at the top of its voice during the 10th Five-Year-Plan. It is precisely this form of brigades which is given preference in the most important document, which in many respects determines the further de-

velopment of our entire economy--the decree of the CPSU Central Committee and the USSR Council of Ministers "On the Improvement of Planning and the Strengthening of the Influence of the Economic Mechanism on the Increase of the Efficiency of Production and the Quality of Work". The brigade form of labor organization and incentive, it emphasizes, must become the basic one during the 11th Five-Year-Plan.

Collective forms of labor organization are now developing in all sectors of the national economy. They are effective in industry, in construction and in transportation. In analyzing the state of affairs in regard to the dissemination of the brigade method, however, it must be taken into account that still not all brigades are working on a single duty with the payment of work according to the final product. Thus, in the industrial enterprises of the country about half of the workers are united in brigades, but significantly fewer people are working according to collective duties—only a little more than 25 percent. The efforts of party, trade union and Komsomol organizations, and economic managers must be concentrated on making precisely this type of brigade the dominating one during the current five-year-plan.

Weighty objective reasons exist to apply the brigade contract in agriculture. For example, in agriculture, as nowhere else, the total result, which is determined only after the completion of the harvest, depends on the smooth coordination of labor during an exceedingly long period. A contract in such conditions helps to raise the interest of each in the achievement of the highest limits by the entire collective. At present 9 percent of the plant-growing brigades and links are working on a contract basis in the kolkhozes and sovkhozes. In particular, it is being used successfully in the farms of the Rostovskaya, Zaparozhskaya, and Volgogradskaya Oblasts, in Uzbekistan and Kirghizia. The May (1982) Plenum of the CPSU Central Committee indicated the necessity of introducing the brigade and collective contract on a broader scale in the sectors of the agro-industrial complex, of linking the payment of labor more closely to its results.

Practice testifies that the dissemination of the brigade method is the more successful the more consistently and purposefully the party organizations promote this. For example, the Kaluzhskiy Obkom of the CPSU in every conceivable way supported the active search of the collective of the Kaluzhskiy Turbine Plant Production Association for the development and introduction of efficient forms of brigade labor organization and incentive, frequently examined the course of the experiment at sessions of the [party] bureau, and helped decide practical questions. Thanks to such concern, a wealth of experience of work in the new fashion has been accumulated in the association and practically in all sectors brigades are working with payment according to the final result. And this manifests itself in a beneficial way in the results of the activity of the collective. Let us say that during the past five-year-plan the volume of production here grew by 75 percent, and labor productivity-by 56 percent. And now, too, the association is working successfully.

The party obkom systematically realized measures to convert the turbine plant into a school of progressive experience, a base for giving systematic assistance in the creation of brigades to other collectives. Seminars and practical

studies were held, in which the managers and specialists of many enterprises took part. As a result, already more than 60 percent of the workers in industry in Kaluzhskaya Oblast are working in accordance with the brigade method. And to a considerable extent this was conducive to the fact that in 1981 the entire growth of production here was obtained by virtue of the increase of labor productivity.

Organizational and explanatory work in regard to the dissemination of brigade forms of work is being carried out consistently and persistently by the Sverd-lovskaya and Dnepropetrovskaya Oblast party organizations. Here the obkoms, gorkoms and raykoms of the party attentively see to it that no formalism is allowed in this matter, that with the creation of the brigades party influence on them becomes increasingly broader and more multi-faceted. The scientific-practical conferences, held in Dnepropetrovsk, Riga and other cities with the participation of party, trade union and Komsomol workers, economic executives, scientists and front-rank workers, have shown what rich experience has been accumulated in the development of the brigade forms of work. The practice of those party organizations deserves approval and emulation which involve in this work a wide range of specialists and the mass organizations and conduct it not in individual enterprises, but along a broad front—in all or in the majority of the production collectives of the kray, oblast or city.

In associations and enterprises special committees are usually created which include the executives of economic and special services, other specialists, and party and trade union activists. The tasks consists in the orientation of the activity of all divisions and services, including planning and material-technical supply, to the brigade structure of production. Only then the new method will yield truly appreciable results. The special instructions about the procedure for the organization of brigades, prepared by the committees already mentioned, serve as a useful aid in its introduction. It is into such a channel that the activity in regard to the development of the brigade method on the part of the Borisovskiy Gorkom of the Communist Party of Belorussia is directed. And the progressive form of the organization and payment of labor has already been introduced in the majority of the enterprises of the city.

At the same time, in the work regarding the creation of brigades of the new type one still encounters shortcomings and omissions which slow down their development; at times the transition to the brigade method is carried out in a hurry, without the necessary preparation. Thus, in the Chekhovskiy Plant of the power engineering industry 19 percent of the workers were encompassed by it at the beginning of 1980. By order of the ministry the plant was directed to increase this indicator to 70 percent by the end of the year. In a short time brigades were created which included 64 percent of the workers. A significant improvement in the organization of labor did not take place. And one after the other the brigades began to fall to pieces. Serious additional measures were needed to gradually correct things.

The party committees and bureaus of enterprises must keep the whole complex of problems under unremitting control that are connected with the creation and organization of the work of brigades: The reorganization of planning and material-technical supply, the change in norm setting and labor incentives, and the development of socialist competition in the new conditions.

In the transition to collective forms of labor organization and payment the question of precisely what kind of a brigade to create in a given sector-specialized or integrated, shift or integrated process -- must be solved. It must be taken into account that the integrated brigade, which brings together workers of different professions, opens up broader possibilities, compared to the specialized brigade, for an increase in efficiency of the use of equipment, the efficient planning of labor time, and the fulfillment of the general task with The creation of an integrated-process brigade which, includes workers from different shifts, makes it possible to achieve a significant reduction in intra-shift losses, in particular by virtue of turning over equipment "in motion". The gain is all the greater the more widely they succeed in introducing cost accounting in the brigades, which provides for the rational use of reserves and the economy of labor, material and energy resources. However, in the selection of the type of brigade we must not act according to a pattern. It is necessary to pay careful attention to the peculiarities of the sector and the concrete conditions of production.

Of importance is also the question about the quantitative composition of the brigade, which must be conducive to the harmonious work of people in the manufacture of the finished product. But in so doing, it must be kept in mind that in small brigades the advantages of collective labor organization and incentive cannot manifest themselves to the full extent. The experience of many enterprises confirms this. At the same time, there are no reasons for the formation of brigades that are too large since they become uncontrollable and collective control and mutual assistance in work grow weaker in them.

The efficiency of the work of a brigade depends in many respects on who heads it. The duty of the party organizations is to see to it that the brigade members designate or elect workers who enjoy the confidence and respect of their comrades, who possess high professional mastery and organizational abilities, and who know how to approach the solution of practical problems from the point of view of the state. Foremen, technicians, engineers and other specialists can extend assistance to the brigade members in the mastery of their difficult duties. It is important to support and direct this useful activity in every possible way. The experience of the collectives, where competition is developed under the slogan "Engineering Support to the Work of the Brigades", for example, deserves attention.

Of great significance is the exchange of experience of the work of brigade members. The forms can be most diverse. In Orsk, for example, city meetings of brigade members in construction have been conducted for a number of years on the initiative of the party gorkom. They aid in making advanced methods of brigade administration the property of every collective. The participation in these meetings of the managers of construction-assembly organizations and enterprises-buyers makes it possible for the brigade members to raise vitally important production questions in a business-like manner and, to a certain extent, solve them here.

The councils of brigade members being created at the enterprises are a good school of advanced experience. On the whole they make an important contribution to the increase in production efficiency at the expense of internal reserves and to the improvement of economic and social activity. Unfortunately, such councils are not created in all collectives where brigade labor organization already predominates.

In the activity of the party organizations regarding the consolidation and dissemination of the brigade method, the concern about the development of the initiative of people and the increase of their creative activeness in the new conditions occupies the most important place. In so doing, [the party organizations] must base themselves on the councils of brigade members being created in the large collectives and support their authority in every conceivable way. The councils are elected by the general meeting of the brigade members and are invested with great trust. They decide many questions connected with the organization of work, the summing up of the results of competition, and the use of other forms of participation in the control of production. Together with the trade unions, the party committees must constantly keep within their purview the problems which are encountered by the brigade councils and the brigades as a whole, and to watch over the strict observance of the rights granted to them.

One of the most important conditions of the effectiveness of the use of the brigade method is to guarantee the material interest of the workers in the achievement of high final results of work. Of decisive significance in this is the establishment of brigade rates for the complex of work operations being carried out and the just distribution of the collective wages. And the party organizations are proceeding correctly which attentively see to it that in questions of the payment of labor concrete circumstances and the specific nature of production are taken into account. In agriculture, for example, in accordance with the decisions of the May (1982) Plenum of the CPSU Central Committee, this will be furthered by granting to directors of sovkhozes and other state agricultural enterprises the right to establish stable rates and dimensions for additional payments for production obtained for a period of up to five years for members of brigades and links working on the basis of a collective contract. ing, they must proceed from the planned wage fund rates, increased to 150 percent depending on the yield of agricultural crops and the productivity of cattle and poultry.

Under the brigade method, the contribution of everyone to the total pot of labor is assessed by the brigade itself, by its council. But in practice this encounters many difficulties, for example, with respect to the application of the coefficient of labor participation. This important indicator must be used skillfully and with sensitivity, since its moral influence on the feelings of the individual and his attitude towards the matter is exceedingly great.

In the fate of the progressive form of labor organization and incentive, a lot depends on the party groups operating in the sectors, in the shifts or in the brigades. The party committees and bureaus are called upon to improve the organizational work in the lower collectives, to increase the militancy of the party groups. In so doing it must be taken into account that the party groups being created directly in the brigades can best influence the formation of the form of labor organization and more effectively promote the successful work of the collective. It is no coincidence that the best indicators are attained by those collectives in which party groups are operating. It is remarkable that in the already-mentioned Kaluzhskiy Turbine Plant Production Association the communists from the very beginning became active guides of the progressive form of labor organization. They were the first to enter the brigades or to head them. In almost half of the brigades party groups have been created.

As in the organization of the brigades themselves, so in the organization of party groups in them, haste is inadmissible. It is important to weigh all aspects of the activity of the brigades, to assess the placement of the communists, the level of their influence on the partyless [workers]. The new form of labor organization places increased demands on the activity of the party groups. For this reason we must be constantly concerned about the improvement of the selection of their organizers. Practice is justifying those party committees which systematically conduct studies for the organizers of the party groups. Moreover, these studies deal not only with the forms and methods of party work, but also with progressive experience of labor organization and incentive.

Now, when a significant amount of experience in the creation of the brigades of the new type has been accumulated, it is important to utilize it widely, to activate the entire organizational work in the given direction. Its execution is aided by the fact that, beginning with January 1982, mandatory statistical accounting is established with respect to the development of the brigade method and its economic efficiency is particularly considered.

At the present time, there has been a significant improvement in the methodic direction of the creation of brigades. A number of important documents have been published which, undoubtedly, will help the collectives to solve many practical problems. First of all, we must mention the model statute for a production brigade, a brigade member, a brigade council and a council of brigade members, approved by the USSR State Committee for Labor and Social Problems and the AUCCTU, as well as the recommendations concerning the development of the brigade form of labor organization and incentive for workers in enterprises of machine building and metal processing. It is important to study these documents attentively in every party and trade union committee, in the economic services, and in every brigade, so as to apply everything that is necessary and useful in the enterprises.

The success in the development of the brigade method will, of course, be all the more significant the more attention it will receive from all links of the administration of a sector. This, for example, is indicated by the experience of the Ministry of Construction, Road and Municipal Machine Building: Here a comprehensive plan for the development of brigade forms of labor was composed. It envisages the selection of base enterprises in every All-Union industrial association for the conduct of seminars on the exchange of experience, the review of problems connected with this by the councils of the directors, the publication of information about the best brigades, etc. The party committee of the ministry occupies an active place in this endeavor. And the dissemination of the brigade method in the sector is proceeding more rapidly than in many others.

The work in regard to the development of the brigade method in associations and enterprises must be organized as consistently and systematically. And here there are good models. For example, in the Minsk Tractor Plant imeni V. I. Lenin Production Association tasks have been defined in regard to the organization of brigades in every year of the current five-year-plan, and they are made concrete for every plant and factory. It is planned to transfer the majority of workers to the progressive form of labor in the collective by 1985.

In the Basic Directions of the Economic and Social Development of the USSR, approved by the 26th CPSU Congress, it is recommended "to carry out measures with respect to the further dissemination and increase in the efficiency of the brigade form of labor organization and payment." The farsightedness of the policy of the party in the economic and social sphere are [evident] in these lines. The active work of the party organizations with respect to the fulfillment of these instructions of the congress will promote the successful realization of the plans of the 11th Five-Year-Plan.

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LABOR

#### OCCUPATIONAL STATISTICS ANALYZED

Moscow VESTNIK STATISTIKI in Russian No 8, Aug 82 pp 30-37

[Article by T. Labutova: "Patterns of Occupational Statistics"]

[Text] The occupational statistics provided by census data reflects the/occupational structure of the labor force and the changes it is undergoing as a result of the scientific and technical revolution taking place in this country. Steady scientific and technical progress and improvements in production are resulting in the rise of new occupations while at the same time the nature of the labor in the traditional occupation is changing in the direction of a steady increase in the numbers of those engaged in mechanized labor. An exceptionally great importance is attached in the USSR to this progressive direction. Article 21 of the USSR Constitution states: "The state cares for improving working conditions and the safety and scientific organization of labor as well as for reducing and ultimately totally eliminating heavy physical labor through a comprehensive mechanization and automation of production processes in all branches of the national economy."

Let us recapitulate certain methodological factors relating to the occupational part of the 1979 census questionnaire and the processing of the related statistics.

[In that questionnaire] occupation was construed as a wage- or income-earning activity that is not necessarily linked to the occupational classification or specialization acquired by attending an educational institution or as a result of work. Thus, a person trained as a teacher but working as an economist was included among economists.

Those chiefly engaged in physical labor were, as a rule, classified according to the work performed, while those chiefly engaged in white-collar work were classified according to the position held. In this connection, for example, engineers and scientists working as heads of enterprises and institutions or their departments were included among the heads of these organizations rather than among engineers and scientists. For the same reason, those counted as engineers, technicians, foremen, and other experts included not only graduates of educational institutions but also practitioners appointed to corresponding positions on the basis of their work experience.

The occupations listed in the census questionnaires amounted to tens of thousands and, of course, it was not possible to process data on every one of these occupations

separately. Hence, these occupations were combined into groups according to the classificational breakdown. For the 1979 census there were 49 such groups, of which 17 related to white-collar work and 32 to, mostly, blue-collar work. Every individual occupation was entirely classified into either one of these two categories. Thus, for example, all salesmen and vendors were classified into the blue-collar category regardless of the nature of their work, educational background, etc. The only exception was agricultural brigade leaders. Those among them who had higher or incomplete higher or secondary special educational background were classified in the white-collar category, while those with lower educational background (below secondary special) were classified in the blue-collar category.

For most of the occupations there was no problem in deciding as to which category should they be classified in. But there also were some that were only conditionally classified in either category. For example, typists and freight forwarders were conditionally classified in the white-collar category, while salesmen, photographers, couriers and some others, were conditionally classified in the blue-collar category. But since these conventions apply only to a small number of occupations, the census data on the breakdown of occupation into the two categories can be utilized in analyses of the process of the gradual disappearance of major differences between mental and physical labor.

The occupations were combined into discrete groups chiefly according to the occupational-subsector attribute (for example, construction workers, footwear workers, food industry workers). Only the occupations specific to a given occupational-subsector group were included in that group, while all the ancillary occupations and those having a purely organizational link with that group were included in other groups. Thus, type-setters, printers, brochure-makers, bookbinders, etc. were included in the group of typographers. The fitters, electrical repairmen, adjusters, etc., working at typographical enterprises were included in the number of those occupied in machine building and metalworking and not among the typographers, since these occupations are ancillary so far as the typographical industry is concerned.

Occupations encountered in many subsectors were combined into groups according to the functional attribute (e.g. those handling hoisting and transport machinery, engineers and technicians, planning and accounting workers).

Within most groups the principal specific occupations were isolated. Thus, those isolated within the group of textile workers were spinners, weavers, binders, etc. In this connection, those included in every particular occupation were all persons engaging in that occupation regardless of their place of employment. For example, the fitters included in the group of those engaged in machine building and metal working comprised all fitters, both those working in machine building and those working in other subsectors of the national economy. The same thing applies to tractor operators, excavator operators, carpenters, joiners, crane operators, and various other occupations. Of the total of 255 occupations, 76 specific occupations were listed for the white-collar group and 179 for the blue-collar group

The combining of many thousands of occupations into 255 specific or group occupations was carried out with the aid of (systematic and alphabetical) occupational glossaries.

The 1979 census revealed that 134.9 million people were occupied in the national economy (not counting those working on private land plots), of whom more than 95 million engaged in mostly physical labor and about 40 million, in mental labor.

The proportion of those engaged in physical labor is steadily diminishing despite their increase in absolute figures, while the numbers and proportion of those occupied in mental labor are increasing. The numbers of and proportions between those engaged in physical and in mental labor changed as follows between 1959 and 1979 (Table 1).

Table 1

	'000 Persons		In Percent of Total			L .
	1959	1970	1979	1959	1970	1979
All employed population	99,130	115,204	134,860	100	100	100
Of which: those chiefly engaged in: Physical Work Mental work	80,353 18,777	84,457 30,747	95,062 30,708	81.1	73.3	70.5
Mental work	18,///	30,747	39,798	18.9	26.7	29.5

These changes were influenced by scientific-technical progress and the growth of culture in our country. Important factors in the decline in the proportion of those engaged in physical labor were the advances in mechanizing production processes and the growth of labor productivity in all branches of the national economy.

During the period between the last two censuses (1970-1978) the numbers of those engaged in physical labor increased 13 percent, but at the same time the number of those occupied in mechanized labor-machine operators, drivers, machine tool operators, assemblers, motor operators, etc., increased still more. Thus, among power-plant workers the number of machine and motor operators increased most significantly, and similarly among miners the greatest numerical increase was recorded for drillers and the operators of mining machinery, concentrating equipment, and peat machinery; among those occupied in machine building and metalworking, for operators of welding and gas-cutting equipment, adjusters, fitters, mechanics, milling-machine operators, and lathe operators; and among woodworking-industry employees, lathe operators, planing machine operators, and other machine tool operators.

Owing to the increase in the level of the mechanization and automation of production processes and labor productivity, the numbers of those employed in certain occupations within the textile, foodwear, and food industries, in logging, etc. have decreased.

Among construction workers, the numbers of the operators of excavating equipment and other construction and road machinery have increased. The qualitative change in the construction process—its conversion into a process of assembling and installing buildings and structures from offsite—prefabricated components and elements, accounts for the rapid increase in the numbers of those engaged in such occupations as assemblers of structural components.

Owing to the systematic improvements in the organization and technology of agricultural production and rise in labor productivity, employment in agricultural occupations decreased 8 percent while gross agricultural output over the same period increased 17 percent.

The technological re-equipping of agriculture, and particularly the growth of the tractor and combine-harvester pool as well as of the pool of other agricultural machinery, which over the 1970-1978 period increased by 1,290,000 units, resulted in a 24-percent increase in the number of workers servicing that machinery.

The growth of agricultural specialization resulted in a marked increase in the number of orchardists and vintners (by a factor of 3) and vegetable and melon growers (by a factor of 2.6). The number of irrigation workers increased by a factor of 1.4.

Owing to the mechanization of individual processes in railroad transport, the total number of railroaders decreased somewhat compared with 1970. At the same time, the number of locomotive machinists and their helpers increased over that period.

Owing to the increasing use of hoisting and transporting machinery, the number of the operators of cranes and other such machinery increased 53 percent and the number of sling operators and tackle-block operators, 48 percent.

While the number of those employed in motor transport and urban electric rapid transit increased 43 percent during the inter-census period, the number of those employed in non-mechanized forms of transportation declined sharply. Thus, the number of carters decreased by nearly two-thirds.

The growth of the sphere of services caused employment in communications during the 1970-1978 period to increase 15 percent; in trade and public feeding, 32 percent; and in communal, household and general services, 13 percent.

However, despite the marked increase in the numbers of those occupied in mechanized labor, millions of people in this country still engage in manual, low-skill, and heavy physical labor and the elimination of that labor is not just an economic problem but also a major social problem. "The solution of this problem would mean the elimination of major obstacles on the path toward transforming work into the primary vital need of every individual."\*

During the inter-census period the numbers of specialists engaged in chiefly mental labor [white-collar work] continued to increase. The number of engineers and technicians increased by a factor of 1.4. Within that group the greatest numerical increase (by a factor of 1.8) occurred among engineers, followed by chief engineer-technician specialists (by a factor of 1.6), designers (by a factor of 1.4), and foremen (technician personnel)—by a factor of 1.3.

Among agricultural experts, the number of agronomists and zootechnicians increased by a factor of 1.2, and veterinary physicians, by a factor of 1.6.

<sup>\*&</sup>quot;Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Politizdat Press, 1981, p 57.

The numbers of physicians, chief physicians, and other heads of medical and prophylactic establishments increased by a factor of 1.5; dentists, by a factor of 1.3; and medical assistants, midwives, and nurses, also by a factor of 1.3.

The growth of science and culture resulted in increasing by a factor of 1.4 the numbers of the heads of scientific research establishments and geologic prospecting organizations, as well as of scientists and higher-school educators. The number of physical culture lecturers and teachers as well as coaches increased by a factor of 1.2 compared with 1970, and similarly the number of administrators and teachers in children's homes, kindergartens, and nurseries, as well as of boarding-school teachers, increased by a factor of 1.5. All this demonstrates the great concern of the party and government for bringing up the rising generation.

Within the group of planning and accounting workers, the number of economists and statisticians increased by a factor of more than 1.5; heads of planning, financial, and planning-economic departments and computer centers, by a factor of 1.3; and bookkeepers and cashiers, by a factor of 1.2.

In connection with the reduction in the number of kolkhozes owing to their mergers and the transformation of some kolkhozes into sovkhozes upon the decision of general meetings of kolkhoz members, the number of kolkhoz chairmen and deputy chairmen decreased 15 percent. At the same time, the number of sovkhoz directors and heads of sovkhoz departments increased 17 percent.

Thus, a comparison of occupational composition as revealed by the last two population censuses points to a major increase in white-collar employment. This increase is especially notable in comparison with 1926. According to the 1926 census, white-collar employment had been less than 3 million, whereas now it reaches some 42 million, i.e. every 4th worker is basically engaged in mental work.

Rapid technological progress and the utilization of the latest achievements of science and technology are possible only if trained and highly qualified cadres are available. In recent years the influx of graduates of secondary and higher schools into the national economy has resulted in a marked rise in the cultural-technological and educational level of the population as a whole, especially among those employed in the national economy. In 1981 for every 1,000 persons upward of 10 years old there were 661 persons with higher and secondary (complete or incomplete) education; and for every 1,000 gainfully employed persons, 883 persons with such educational background. Such a background was recorded for 767 persons out of every 1,000 occupied in chiefly physical labor, which is 41 percent more than in 1970, and for 983 out of every 1,000 persons occupied in mental labor, that is, 3 percent more than in 1970.

It is worth noting that the differences in the educational level of those employed in physical and in mental labor are decreasing, as illustrated in Table 2.

As this table shows, in 1939 the educational level of mental workers was higher by a factor of 11 than that of physical workers, whereas in 1959 it was higher by a factor of 2.8 and in 1981, only 28 percent higher.

Table 2

	1939 1959 1970 1979 1981		
Number of those with higher and secondary (complete and incomplete) education: per 1000 persons:			
All employed population	123 433 653 805 833		
Those employed mostly in physical work	45 325 543 732 767		
Those employed mostly in mental work	515 896 953 981 983		

The data of the two censuses demonstrate that educational background is closely linked to occupational skills. Among blue-collar workers those with the highest educational background are skilled workers. For example, 90-92 percent of lathe operators, fitters, adjusters, mechanics, construction assemblers, electrical repairmen, milling-machine operators, motion-picture mechanics, machinists, and (marine) power-plant operators as well as 96-98 percent of laboratory workers, radio operators, telegraphers, and computer operators had secondary (completed and incomplete) and higher educational backgrounds, according to the 1979 census. At the same time, that background was reported by 57 percent of those employed in logging and forestry and 52 percent of those employed in communal, household, and consumer services.

Of the workers engaged in agricultural occupations, 57 percent had secondary (completed and incomplete) and higher educational background, and of tractor drivers, combine-harvester operators, and other agricultural mechanizers, 69 percent.

The higher educational background of skilled workers is due to the organization of a broad system of academic and, especially, vocational education.

Comrade L. I. Brezhnev pointed out in the Report of the CPSU Central Committee to the 26th party congress that: "The role of the working class in the life of society is growing.... The strengthening of the leading role of the working class is definitely associated with the growth of its ideological-political maturity, education, and occupational skills. Ten years ago only a little more than half of all workers had secondary (completed and incomplete) and higher educational backgrounds, whereas now it is three-fourths. It is gratifying that the occupational training of the rising generation of the working class is improving. In the 1960s only one-third of young men and women had passed through the system of vocational education, whereas during the 10th Five-Year Plan period alone 12.5 million persons, that is, two-thirds of all new workers, passed through that system."\*

The 11th Five-Year Plan provides for a further expansion of the network of vocational schools as the principal source for replenishing the economy's labor force pool. Plans exist for increasing to 13 million over the 1981-1985 period the number of skilled workers graduated from these schools, as well as for increasing by a factor of 1.6 the number of skilled workers with secondary educational background.

<sup>\*</sup>Ibid., p 52

The very nature of the labor of the present-day worker is changing. As L. I. Brezhnev pointed out in the Report of the CPSU Central Committee to the 26th party congress, "In the productive activity of workers and kolkhoz members physical and mental labor are more and more intertwined. Many of them are innovators and inventors, authors of articles and books, and state and public activists. They are, in the full meaning of the word, highly cultured and intelligent people."\*

Major changes in educational level have also taken place among those occupied in mental labor. The number of persons with higher and secondary special education is growing: in 1970 they accounted for 60 percent and in 1979, 72 percent. Over the same period the number of persons with general secondary education dropped to 18.6 from 19.1 percent, and with incomplete secondary education, to 7.5 from 16 percent, i.e. more than in half.

According to the 1979 census, those with the highest educational background were members of the juridical professions (90 percent with higher, incomplete higher, and secondary special education), followed by agronomists, zootechnicians, veterinary workers, and foresters (89 percent); scientists, educators, and medical workers (88 percent); litterateurs, journalists, and heads of enterprises and enterprise departments (82 percent). Among clerical workers this educational background was recorded for only 27 percent and among workers of communal and consumer services enterprises, 37 percent.

In the USSR the employment of women, especially in white-collar jobs, is steadily rising. Of the 135 million persons employed in the national economy according to the 1979 census, one-half were women. Over the 1970-1978 period the proportion of women engaged in mostly physical labor decreased 2 percent (to 45 from 47 percent), while the proportion of women in mental labor increased 3 percent (to 61 from 58 percent). Currently there are more women than men engaged in mental labor (Table 3).

Table 3

	In % of Total Employment by Sex				
	Employmen	t in Mostly	Employment in Mostly		
	Physical Labor		Mental Labor		
	1970	1979	1970	1979	
All employed population	73.3	70.5	26.7	29.5	
Men	77.8	77.2	22.2	22.8	
Women	68.8	63.7	31.2	36.3	

In 1980 women accounted for 53 percent of specialists with higher educational background and 64 percent of specialists with secondary special background. According to the 1897 census, women in Russia had accounted for only 608 physicians, 284 scientists and litterateurs, and 4 engineers, whereas according to the 1979 census women accounted for 69 percent of all physicians (including chief physicians), 72 percent of dentists, 70 percent of scientists and educators, 82 percent of cultural and enlightenment workers, 61 percent of workers of literature and the press, and 48 percent of engineers (including chief engineer-technician specialists). There

<sup>\*</sup>Ibid., p 53.

are many women among secondary medical personnel, designers, draftsmen, norms and standards personnel, technicians, laboratory workers, planning and accounting workers, trade personnel, public feeding personnel, and the personnel of procurements, supply, and marketing organizations as well as communal and consumer services enterprises.

Women engaged in physical labor are employed chiefly in light and mechanized occupations. Thus, according to the 1979 census, women accounted for 94 percent of sewing-machine and computer operators, 92 percent of trade and public feeding employees, 91 percent of communal, household, and consumer services employees, 89 percent of inspectors, quality controllers, and sorters, 86 percent of textile workers, 82 percent of warehousing employees, weighing-scale operators, shipping clerks, and distributors, and 81 percent of food-industry employees. The occupations of brigade leader, farm head, agronomist, and zootechnician have become customary for women. More than one-half (52 percent) of all agricultural workers are women.

The findings of the 1979 census also graphically demonstrate the numerical growth in the nationalities belonging to the working class and intelligentsia. During the 1970-1978 period the numbers of blue- and white-collar workers in every Union republic had increased. The growth rate of those occupied in white-collar work has in most republics been faster than that of those occupied in blue-collar work (Table 4).

The USSR is a leader in world science, technology, and culture, and a major part of the credit for this belongs to the Soviet multinational intelligentsia. Large numbers of the engineer-technician, scientist, and artist intelligentsia as well as educators and physicians have arisen and are growing in every republic, as mentioned in the CPSU Central Committee resolution "On the 60th Anniversary of Establishment of the Union of Soviet Socialist Republics."

In the 1970s cadres of skilled ethnic workers have grown in all the Union republics, particularly in those in which their proportion had been below the Union-wide level.

Table 4

	1979 in % of 1970		
	Mostly Blue-	Mostly White-Collar	
	Collar Employment	Employment	
USSR	113	129	
RSFSR	110	126	
Ukrainian SSR	106	127	
Belorussian SSR	109	137	
Uzbek SSR	144	155	
Kazakh SSR	121	138	
Georgian SSR	117	126	
Azerbaijan SSR	152	140	
Lithuanian SSR	107	137	
Moldavian SSR	108	148	
Latvian SSR	104	120	
Kirghiz SSR	130	143	
Tajik SSR	149	148	
Armenian SSR	144	154	
Turkmen SSR	144	137	
Estonian SSR	106	120	

Comrade L. I. Brezhnev stressed in his speech at the November (1981) Plenum of the CPSU Central Committee: "The current demographic situation requires an improved utilization of manpower resources." Of great importance to this issue is the development of a comprehensive program for reducing manual, and especially heavy, labor.

Socialism as a system of society harbors an inherent tremendous potential for a rational and humane application of the working individual—that principal productive force of society.

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EDUCATION

## CLOSER VOCATIONAL-GENERAL EDUCATION TIES ADVOCATED

Minsk KOMMUNIST BELORUSSII in Russian No 6, Jun 82 pp 83-89

[Article by A. Gornak, instructor of the Department of Science and Educational Institutions of the Central Committee of the Communist Party of Belorussia, candidate of economic sciences: "Qualified Cadres for the National Economy"]

[Text] Questions of professional education occupy an important place in the socio-economic program of the 11th Five-Year-Plan. And this is not accidental. In the conditions of the ever-increasing scales of communist construction and the constant acceleration of scientific-technical progress, the role of the training of specialists of the medium link and of qualified workers increases continuously.

The alumni of technical schools and professional-technical training institutions, equipped with necessary knowledge and practical habits, educated in the spirit of infinite devotion to the Communist Party and the socialist Homeland, are working successfully in all corners of Belorussia and beyond its borders, making a significant contribution in the realization of the tasks of economic and cultural construction outlined by the decisisions of the 26th CPSU Congress.

At present 135 secondary specialized education institutions are operating in the republic, in which 163,000 students are studying 180 specialties. has been a substantial expansion in the training of cadres of the middle link for rapidly-growing sectors of the national economy. The training of technicians has been organized in 11 specialties, such as the technology of optical parts, the equipment of plants for the production of plastics and rubber, the repair and service of everyday radioelectronic equipment, electromechanical coating, the processing of information in automated control systems, the architecture of rural settlements, and others. During 1976-1980 the secondary specialized school of the republic trained 218,300 specialists for the national economy. This made it possible to meet practically fully the demand for specialists of the middle link on the part of all sectors of the national economy. During this period the qualitative composition of the engineering-pedagogical cadres improved and the progress of the students increased. The study and laboratory base of the secondary specialized education institutions has been strengthened somewhat and a number of dormitories have been put into service. During the past five-year-plan the ministries of the rural economy and the public health service of the BSSR have devoted a great deal of attention to the

improvement of the educational-material base of of the subsidiary educational institutions. They have built respectively five and four educational buildings for 4,000 and 2,700 study places and two dormitories for students each.

Practice has shown that professional-technical education is an important part of the system of public education, and the professional-technical school is a basic school for the training and formation of an adequate replenishment of the working class. During the years of the 10th Five-Year-Plan alone, their network in the republic has increased to 44 educational institutions. More than 250 different projects designed to serve educational, social-everyday and sports purposes have been introduced into operation in the existing professional-technical schools. More than 119 million rubles of capital investments have been expended for these purposes.

The number of students in the professional-technical schools has increased by 23.3 percent during the five year period, including in the secondary professional-technical schools—by a factor of 2.1, and in the technical schools—by a factor of more than 1.5, constituting 143,500 people. The training of work cadres in 97 new professions has begun, mainly for rapidly developing sectors of the national economy that determine scientific—technical progress. Training of workers is being conducted in 303 professions in 223 professional-technical schools. During 1976—1980 the professional technical schools provided the national economy with 403,400 skilled workers. Special attention was given to the expansion of the training of workers for agriculture, construction, light and food industry, and enterprises of everyday services to the population.

In the system of professional-technical education the transition to a qualitatively new level of the training process—the training of cadres with a secondary education—has practically been completed. The republic Institute for Increasing the Qualifications of Workers in Engineering and Pedagogy in Professional—Technical Education has been opened, where annually more than 1.5 million people go through retraining. A Belorussian branch of the All-Union Scientific Research Institute of Professional—Technical Education has been created for the purpose of the scientifically—based and effective solution of socio—economic and psychological—pedagogical problems.

The specialization of professional-technical schools has been carried out. The professional-technical schools are making the transition to the training of workers complicated professions, high skills, and broad profile. There has been an increase in the progress of students in the subjects of the specialized, general technical and general education cycles. Every year approximately 20 percent of the graduates receive increased ratings. Much is being done to provide for the tight unity of the ideological-political, labor and moral education of the students.

By accelerating the development of the entire society, scientific-technical progress calls forth fundamental and genuinely revolutionary changes not only in its material-technical base, but also in the very content of labor and in the structure of the productive forces. It changes the role and place of the individual in the production process, exerts an important influence on the character of his work activity, and makes new demands with respect to the pro-

fessional and moral qualities of the workers. The documents and materials of the 26th CPSU Congress, as well as of the 29th Congress of the Communist Party of Belorussia, taking these phenomena and processes into account, outlined a long-term program of actions, means and methods for purposeful work in regard to the improvement of the whole business of the training and education of technicians and skilled workers. An important role in the realization of the measures envisaged by the Law on Universal Secondary Education of all citizens of our country is allotted to the secondary specialized and professional-technical schools. Already today, more than 35 percent of the graduates of the eighth grades receive it in technical schools and colleges, and this tendency will constantly grow. Taking this into account, it is necessary to secure the most rational distribution of the graduates of the eighth grades of the general education schools among the technical schools, the professional-technical schools and the ningth grades.

Some work has been done in the republic with respect to the centralization of the management of the technical schools. Thus, 16 medical schools have been turned over from the jurisdiction of the oblast departments of the public health services to the direct subordination to the BSSR Ministry of Health, and 10 music schools—to the jurisdiction of the BSSR Ministry of Culture. And all the same, in our view, the administration of the secondary specialized school of the republic is in need of further improvement.

The secondary specialized education institutions of the BSSR at the present time are under the jurisdiction of 26 ministries and departments. Such decentralization led to significant duplication in the training of cadres. Today, for example, the builders in the republic are trained by 16 technical schools which are subordinated to the Administration of the Belorussian Railway, the Cooperative Union of the BSSR, the USSR Ministry of Power and Electrification, the Ministry of Land Reclamation and Water, the Ministry of Agriculture, the BSSR Minyuz [Ministry of Higher and Secondary Specialized Education], and others. Of the ministries and departments which have technical schools under their jurisdiction, only the BSSR Ministries of Health and Culture do not train building technicians. And this at a time when about 70 percent of the graduates of technical schools for building receive job assignments. An analogous situation exists with respect to the training of cadres of the middle link in a number of specialties for light industry, everyday services to the population, public catering, transportation, and others. There is a lack of cooperation in the training of these cadres.

The departmental dispersion of the technical schools, as well as the transfer of some of them to the jurisdiction of union ministries, have removed a significant part of the training of technicians from the control of the republic planning organs. In the technical schools that have been transferred, the formerly-existing evening divisions have been closed and they are narrowly specialized without regard for the local or regional demand for specialists—which frequently leads to the surplus of cadres in some places and a shortage of them in others.

In connection with the fact that in the republic monfinal answer has as yet been found to the question, in which of the ministries it is most expedient for one

or another secondary specialized education institution to be located, there has been a noticeable weakening in the construction and expansion of their educational-material base. Only on the basis of the fears that the technical schools within its jurisdiction might be transferred to other ministries can one explain the fact that the BSSR Ministry of Higher and Secondary Specialized Education during the 10th Five-Year-Plan did not designate a single ruble for the improvement of the educational base of its secondary specialize education institutions and did not construct a single dormitory for the students. And a great need for them has made itself felt.

To whom must the technical schools and colleges be subordinated in the majority of cases? The answer is simple: To the BSSR Ministry of Higher and Secondary Specialized Education, the organ which has been specially created for these purposes. Only educational institutions training specialists for public health, culture and agriculture, evidently, may constitute exceptions, in view of the traditions that have developed and the specificity of the training of personnel for these sectors.

In the past years we are observing an obvious lag of the scales of the training of skilled workers behind the demand for them in the majority of the sectors of the economy, as well as a discrepancy between the training of workers and the output of specialists with higher and secondary specialized education. At the beginning of the current year, for example, 146,000 people were studying in the professional-technical schools of the republic, but in the VUZ's and technical schools—2.3 times as many. And if, let us say, in Moscow, Leningrad, and Kiev dozens of higher education institutions are involved in the scientific determination of the demand of industries for specialists, then in Minsk, as well as in the republic as a whole, almost not a single VUZ and not a single scientific subdivision is seriously studying this problem.

It cannot be said that in our republic nothing was done in this direction. Already in February 1975, the Central Committee of the Communist Party of Belorussia and the BSSR Council of Ministers charged the BSSR Ministry of Education. the BSSR Ministry of Higher and Secondary Specialized Education, and the BSSR State Committee for Vocational and Technical Education with the development of scientifically-based recommendations concerning the rational correlation of ways for the young people to obtain a secondary education in the conditions of the BSSR. This matter has been taken up most seriously by the scientific research problem laboratory for the scientific organization of labor of the Belorussian State Institute of the National Economy imeni V. V. Kuybyshev, which the BSSR Ministry of Higher and Secondary Specialized Education charged with the conduct of a scientific determination of the demand and the volumes of training of specialists of the middle link in the foreseeable future.

Taking into account demographic predictions and the balance of the distribution of the youth, the recommendations of the laboratory make an attempt to determine the optimal structure of labor resources and to outline ways to eliminate the reasons which caused the overproduction of specialists with a secondary specialized education. At the same time, the BSSR State Committee for Vocational and Technical Education, being, it would seem, the most interested department in the solution of the given problem and having in its jurisdiction

a scientific subdivision, turned over the execution of this part of the task to the BSSR Ministry of Education. But here this important social problem was decided on the basis of departmental interests, considering the fact that the recruitment for the professional-technical schools and the technical schools must be accomplished primarily with the graduates of the 10th grades, having forgotten the fact that the type of the secondary professional-technical school, recruiting only eighth graders, is recognized as basic in the decisions of the party and the government. As far as the technical schools are concerned, the admission of tenth grade pupils has begun comparatively recently. It is also impossible to disregard such factors as the higher annual competitions of graduates of the eighth, but not the tenth classes, enrolling in the technical schools. They have a significantly higher average number of education certificates and their parents are most often interested in having their children obtain a specialty at an earlier age. Practice confirms that, during the fouryear-long term of training, the eighth graders go through a good production adaptation and are secured better in production. All of this indicates that the technical schools must recruit primarily from the graduates of the eighth grade.

Having studied the "life plans and professional inclinations" of eighth graders with the aid of questionnaires, the Scientific Research Institute for Pedagogy of the BSSR Ministry of Education established that 55.8 percent of them desire to continue their education in ninth-grade classes. Proceeding from these exceedingly proximate numbers, it is planned to admit 55.5 percent of the eighth graders into ninth grades in the year 2000. The survey took place three years ago. The question arises, why these data must correspond to the end of the 20th century, if it is planned to admit 61.3 percent of the graduates of the eighth grades into the ninth grades in 1985, and 60.2 percent in 1990? If we seriously want to improve the labor training of the young, then, surely, already in the near future a significantly higher percentage of the eighth graders must be sent to the professional-technical schools, where this training is built on a real production foundation.

For the time being professional-technical education in the republic does not have a scientifically-based set of elaborations about the necessary number and distribution of schools by sectors of the national economy. Hence the significant unevenness in the provision of work cadres through the graduates of these educational institutions: 42 percent of them are being assigned to agricultural production, 30 percent--to industrial enterprises, 16 percent--to construction organizations, and only 12 percent--to all other sectors of the national economy. This indicates that the professional structure of the training of skilled workers in the professional-technical schools still does not fully meet the demands of the national economy with respect to cadres. Thus, the basic mass of rural mechanics is assigned to field crop cultivation and quite an insignificant number of cadres are being trained for animul husbandry and enterprises of everyday life in the village. In industry the graduates of the professionaltechnical schools are used in the majority of cases in the metal-processing enterprises. A small number of skilled workers are trained for transportation and communications, trade and public catering, housing and municipal services, and everyday services to the population.

Important problems are also in evidence in the distribution of the network of educational institutions which carry out the professional training of the young, their specialization. Frequently within a limited territorial region or even in one and theesamespopulated area technical schools, professional-technical schools, and course combines are located which train young people in one and the same specialty. This significantly narrows the choice of professions, complicates the recruitment of educational institutions, the organization of production practice, as well as the distribution and employment of the graduates. Precisely for these reasons, already today the production capacities and the dormitories of the Vysokovskoye Rural Professional-Technical School-12 of the the Orshanskiy Rayon and the Druyskoye Rural-Professional Technical School-39 of the Braslavskiy Rayon are being utilized only to the extent of 50-60 percent. Extremely limited, especially in the rural locality, is the choice of specialties for the professional training of girls, and little concern is being manifested about the creation of the necessary conditions for attaching them to the village. It would be expedient to expand the admission of girls into the secondary professional-technical schools for agricultural specialties, as well as to organize, in the rural professional-technical schools and in inter-school education-production combines, the training of girls in specialties of the sphere of everyday services to the population, public health, culture, trade, construction (decorators), artistic crafts, etc.

Frequently the principle of conformity and coordination of centralized (industrial) and territorial planning of the training and distribution of the students of professional-technical schools and technical schools is not observed. The subordination of these educational institutions to a certain production sector and their dependence on the base enterprises lead to the fact that the possibility of maneuvering in questions of determining the list of professions, the distribution of graduates, and the specialization of the educational institutions, is significantly narrowed. Frequently the graduates of professional-technical schools have to assigned from the base schools of one profile to work in other oblasts, when the training of the same specialists is being carried out there, but in schools of other production sectors.

The correct professional orientation of young people, above all school children, acquires great importance and urgency. The selection of a profession is an exceedingly responsible decision in the life of every young person. A miscal-culation in this matter involves not only years lived without full return, and the moral and material losses for the individual, but also significant losses for the society.

It must be noted that the state of affairs with respect to the recruitment of the individual professional-technical schools and technical schools is not turning out in the best way. For some of the so-called "fashionable" professions the competitions in some technical schools have reached 10 and more people per place; the competitions in a number of professional-technical schools have also risen. At the same time, a significant part of the young people still underestimates such basic professions as lathe operator, metal worker, painter, and weaver. Difficulties are being observed in the recruitment of the technical schools and professional-technical schools with a construction and agricultural profile.

In our view, the organs of education, the directors and party organizations of the general education schools of the republic should take additional measures to improve the orientation of the students towards the working professions, to increase the responsibility of the teachers for the qualitative composition of the pupils being directed into the professional-technical schools, and to tightly link the general education training with the training of the pupils for work and for life.

Closer cooperation of the technical and professional-technical schools with the general education school is especially important in the conditions of the present demographic situation. Therefore, already in the immediate future we are faced with a significant expansion of the framework of the professional-technical education of the young people who have completed the general education school, with an appreciable increase in the contingent of students in the second-ary professional-technical schools. The BSSR State Committee for Vocational and Technical Education, the BSSR Ministry of Higher and Secondary Specialized Education, other republic ministries and departments, industrial enterprises, kolkhozes and sovkhozes, and local party, soviet and economic organs can give important assistance to the organs of education in this work.

The system of professional orientation is in need of improvement. It must provide concrete help to young people, individual vocational counseling based on a comprehensive knowledge of the aspirations and abilities of every young man and young woman, it must be based on profound and serious scientific research, encompassing the problems of the economy and sociology of labor, adult psychology, pedagogy and professional suitability. This system is called upon to form a corresponding psychological attunement in the pupils. In order to give young people the correct social orientation, one must inculcate love for the working professions and to socially useful labor already at a young school age.

Taking into account the demographic situation that has developed in the republic and some of the socio-economic consequences of the stormy growth of the cities, the acute necessity arises to orient the technical schools and the professional technical schools towards recruitment of their local youth. To date this question has not received the attention it deserves. To take Minsk, for example. In spite of the extensive construction of housing, the problem of housing does not disappear from the daily agenda. At the same time, by virtue of the graduates of technical and professional-technical schools alone, who stay on in Minsk to work, the city grows by 5,000-7,000 people every year. But, you know, there is a real possibility to recruit for many educational institutions of Minsk on the basis of the local youth alone, as this is done in Moscow, Leningrad and other places. The Minsk Gorispolkom should give attention to this circumstance. A similar situation is characteristic also for other cities of the republic and, first of all, for such cities as Brest, Grodno, Baranovichi, and Molodechno.

Many party committees of the Communist Party of Belorussia are giving serious attention to the technical and professional-technical schools. The directors of these educational institutions and their deputies for education and training and education and production work have been brought into the nomenklatura of the raykoms (gorkoms) of the party. Questions of the education and training work of the schools are periodically reviewed at sessions of the bureaus of the obkoms, gorkoms and raykoms of the Communist Party of Belorussia.

At the same time, frequently the party committees do not always approach in a principled way the selection of the candidates for the positions of the directors of the technical and professional-technical schools, their deputies, in particular the deputy directors for education and training work. cases when people are recommended for these positions who do not meet the increased requirements. As a result of this, as well as the inconsistent position of the BSSR State Committee for Vocational and Technical Education and its oblast administration, the majority of the professional-technical schools are headed not by specialists of the appropriate profile, as this is required by the Decree on the Professional-Technical School, but by people who have, as a rule, a humanistic education, which cannot but manifest itself in the level of the leadership of the engineering and pedagogical collectives, in the professional training of work cadres, and in the business relations with the base enterprises. The frequent removability of the directors of individual educational institutions is also being allowed. For example, during the past seven years, five directors were removed in the Mogilevskiy Sovkhoz-Technical School.

The construction of projects of professional-technical education is being carried out in an unsatisfactor manner. Thus, during the years of the 10th Five-Year-Plan, 37.5 million rubles were underutilized, which is equivalent to 14 new educational complexes. Even in the current five-year-plan the state of things is not improving.

The provision of technical and professional-technical schools with equipment for educational purposes also requires significant improvement. They are receiving inadequate allotments of excavators, bulldozers, modern trucks, machinetool equipment, and almost no buses and truck cranes. As a result, the graduates of the technical and professional-technical schools frequently must be retrained in production, which not leads to the inefficient expenditure of time and state funds, but also has a negative influence on the moral and prestige factor of these directions of education.

The questions connected with the improvement of the training of the young generation of the working class and specialists of the middle link require an interested approach on the part of the appropriate ministries and departments. The concrete and comprehensive solution of these questions will make it possible already in the immediate years ahead to raise the level of professional technical and secondary specialized education, to provide the national economy with the necessary number of highly-skilled workers and technicians.

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## EDUCATION

## HIGHER EDUCATIONAL INSTITUTIONS READY NEW PROGRAMS

Moscow PRAVDA in Russian 12 Jul 82 p 2

[Unsigned article: "On the Threshold of the VUZ"]

[Text] Higher educational institutions of the country are preparing for the admission of a new contingent of students. A total of 892 VUZ's will admit to day, evening and correspondence divisions 1,500,000 freshmen, that is, roughly as many as last year.

Although admission rules have not been significantly changed, they have been amended, a TASS correspondent was told at the USSR Ministry of Higher and Secondary Specialized Education. They reflect first of all the tasks stemming from the decisions of the May (1982) Plenum of the CPSU Central Committee. There is growing concern for young additions to rural cadres. For this end, the number of engineers, veterinarian physicians and economists to be graduated is to be increased.

Admittance has been permitted to the preparatory division of agricultural VUZ's for the benefit of kolkhozes and sovkhozes of graduates of general educational schools and members of student production brigades without a year's length of service.

The USSR Ministry of Higher and Secondary Specialized Education recommends that farms send more of their grant holders to institutes and tekhnikums. Regardless of length of service, children of kolkhoz farmers and sovkhoz workers can be sent by farms to VUZ's training medical and pedagogic cadres, club workers and specialists in physical culture and sports.

A two-year length of service is also not required for young workers sent to VUZ's by grain-receiving and grain-processing enterprises for mastery of the following specialties: machines and apparatus of food production operations, storage and technology of grain processing.

Graduates of medical VUZ's with a secondary medical or pharmaceutical education who have worked in their specialty for not less than three years as well as junior medical personnel with a length of service of not less than two years in health care institutions have received benefits. They can be registered in a

VUZ in the case where they are short one or two points in entrance examinations in regard to the held competition.

An innovation has also been introduced with respect to students of preparatory divisions engaged in correspondence and evening forms of study. Whereas formerly their graduates were permitted to continue their education in a VUZ only in the day division, now they can also study in the evening and correspondence divisions.

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